BILL BEAUREGARD ASSISTANT DIRECTOR OF PUBLIC WORKS - UTILITIES

# Town of Westerly Rhode Island PUBLIC WORKS



68 White Rock Road Westerly, RI 02891 TEL: (401) 348-2561 FAX: (401) 596-9512 pcorina@westerlyri.gov

## **Demolition of Residential Building**

**RFQ Number: 2018 - 050** 

ADDENDUM NO. 1 - August 2, 2018

To: All Known Bid Document Holders

From: Bill Beauregard

Assistant Director of Public Works - Utilities - Town of Westerly

68 White Rock Road Westerly, RI 02891

The following items represent additional information provided, changes, amendments or clarifications to the Contract Bid Documents for the above referenced project:

1.) An asbestos survey been done and filed with the state department.

Please see attached Asbestos Abatement Plan

Please see attached RI DOH Asbestos Plan Approval Correspondence

2.) The bid documents note that the bid is to be all inclusive. The property will be cleared of environmental concerns. The asbestos removal will be performed prior to the demolition work being performed by:

AA Asbestos Co. Inc R-1307 Hartford Ave. Johnston RI 02919 All other terms and conditions of this bid remain unchanged.

The above clarifications and information does not warrant reissuance of any portions of the Bid Documents (including Bid Form). Prospective Bidders should acknowledge receipt and acceptance of Addendum No.1 with executed copy of each addenda returned with the executed bid form.

Bidder acknowledges receiving Addendum No. 1 dated August 2, 2018 and considers the information, changes and clarifications to be made part of the Bid Contract Documents.

Addendum No.1:			
Received and Accepted By:	Contractor:		
Signed By:		Date:	

# ASBESTOS ABATEMENT PLAN RESIDENTIAL DWELLING 15 TOWER STREET WESTERLY, RHODE ISLAND PROJECT NO. 201800015

### Prepared for

Town of Westerly - Department of Utilities Attention: Mr. Paul Corina 65 White Rock Road Westerly, RI 02891

Prepared by

Bock and Clark Environmental 889 Boston Neck Road, Suite 2 Narragansett, RI 02865 TEL: 401-465-2801

February 14, 2018

#### Index

- I RI State Asbestos Abatement Form ASB-16
- II RI State Asbestos Abatement Forms ASB-16A

**Abatement Area 1 – Basement** – Approximately 10 square feet of thermal system insulation (TSI) paper located above the boiler and approximately 16 square feet of transite board attached to the ceiling adjacent to the chimney.

**Abatement Area 2 – First Floor Bathroom** – Approximately 34 square feet of flooring material.

**Abatement Area 3 – Roof Areas** – Approximately 164 linear feet of black sealant around the perimeter of the two southern flat roofs and along the portion of the side porch roof attached to the dwelling, approximately 150 square feet of roofing (top and bottom layers) associated with the side porch roof and approximately 180 square feet of roofing associated with the front porch roof.

- III RI State Asbestos Abatement Form ASB-16B
- IV Attachments:

"Asbestos Abatement Plan" for Residential Dwelling, 15 Tower Street, Westerly, RI, dated February 14, 2018

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

# **Department of Health**

### Office of Occupational & Radiological Health

#### APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

1. Building Owner's Name:		Building Owner's Mailing Address and Telephone Number:
Town of Westerly		relephone rumber.
	,	Street: 45 Broad Street
2. Application Prepared By:	(	City/Town: Westerly
	,	Zip: <u>02891</u>
Vincent L. Jacques	r	Telephone No: 401-348-2561
		(Area Code, No., Ext.)
RI certification No: AAC-409 PD		Person to be contacted regarding this
Telephone No: (401) 465-2801 (Area code, No., Ext.)	i a	application:
	]	Name: Mr. Paul Corina
	,	Геlephone No <u>: 401-348-2561</u>
		(Area Code, No., Ext.)
Name (if applicable): Residential Dwelling Street: 15 Tower Street		
City/Town: <u>Westerly</u>		Zip: <u>02891</u>
6. Is this application being submitted in res Asbestos Abatement plan"? ( ) Yes If Yes, what is the due date for submittal of A Evaluation Number on the Notice:	(X)	lan?(Mo.) (Day) (Yr.)
7. Contractor who will be performing abatem	nent work (	if selected):
Name: To be determined		R.I. License No.:
FORM ASB – 16 (11/2003) REPLACES FORM	ASB 16 (3/9	2) WHICH IS OBSOLETE

8. Estimated Starting Date of Ab notifications have been made.	atement Work: As soon as the plan is approved and all
	(Month) (Day) (Year)
9. Estimated Completion Date of A	Abatement Work: Expected to take one week to complete.  (Month) (Day) (Year)
10. Type of Asbestos Abatement:	(Check all that apply)
( ) Removal	( ) Enclosure
( ) Encapsulation	(X) Demolition
( ) Operations and Maintenanc	e Only ( ) Other (Specify)
11. Type of Building:	<ul> <li>( ) School</li> <li>( X ) Privately Owned Building</li> <li>( ) Publicly Owned Building</li> <li>( ) Residence</li> <li>( ) Other (Specify)</li> </ul>
12. Building Access:	<ul> <li>( ) Public Access (≥ 25% of Building Area)</li> <li>( ) Limited Public Access (&lt; 25% of Building Area)</li> <li>( X ) No Public Access</li> </ul>
<ol> <li>Bulk Sample Collection and An A). Person collecting bulk sam</li> </ol>	
Name: Brian A Piccolo	RI Certification No.: AAC-0657 IS
B). Sampling Methodology: ( ) EPA AHERA Sampling	ng requirements [40 CFR 763.86].
	ontaining Material in School Buildings: A Guidance 3-014) or Guidance for Controlling Asbestos Containing EPA-560-5-85-024)
(X) Other (Specify)	Representative Sampling
C). Laboratory performing the	analysis of the bulk samples
Name: Asbestos Identifica	tion Laboratory Inc. RI Certification No.: AAL-0121
D). Analytical Methodology:	
( X ) EPA Interim Methological Samples [PLM method on the control of the control	od for the Determination of Asbestos in Bulk Insulation ly].
(X) Other (Specify)	

14. Pre-Abatement Air Sample Collection and Analysis:
A). Person collecting pre-abatement air samples:
Name: Brian Piccolo Affiliation: Bock and Clark Environmental
B). Laboratory performing analysis of pre-abatement air samples.  Name: Bock and Clark Environmental RI Certification No.: AAL-125
C). Methodology used in the collection and analysis of pre-abatement samples:
(X) NIOSH Method 7400 [Most Current Revision]
( ) OSHA 29 CFR 1926.1101 – Appendix A & B
( ) Other (Specify)
15. A. Indicate how the regulated asbestos containing material (RACM) will be removed from the abatement site. If a hauler or broker will be used to transport the RACM to a disposal site, they must also be identified. To be determined by contractor
B. Provide the name and location of the authorized asbestos waste facility to which the removed material will be transferred for disposal (if known).  To be determined by contractor
16. Person designated as compliance monitor for abatement work. [NOT REQUIRED]
Name:
Affiliation:

17.	In-Process & Clearance Air Sampling:	And the state of t
	A. Describe on an attachment the type, number and lo collected outside the work area during the abateme See AAP	
	B. Describe on an attachment the plan of action to be Occupational Air Exposure Standard for Asbestos is exceeded outside the work area during the abater See AAP	(0.01 fibers per cubic centimeter)
	C. Describe on an attachment the type, number and lo collected as part of the final clearance testing.  See AAP	cation of air samples that will be
	D. Describe on an attachment the plan of action to be of Occupational Air Exposure Standard for Asbestos (is exceed during final clearance testing.  See AAP	followed if the Indoor Non- (0,01 fiber per cubic centimeter)
18.	A separate and fully completed Form ASB-16A must abated. List below the entry in Item 1 from each attach	
	Abatement Area 1 - Basement - Approximately 10 insulation (TSI) paper located above the boiler and transite board attached to the ceiling adjacent to the chi	approximately 16 square feet of
	Abatement Area 2 – First Floor Bathroom – Approximaterial.	nately 34 square feet of flooring
	Abatement Area 3 – Roof Areas – Approximately around the perimeter of the two southern flat roofs a porch roof attached to the dwelling, approximately 15 bottom layers) associated with the side porch roof and roofing associated with the front porch roof.	nd along the portion of the side 0 square feet of roofing (top and
19.	I certify that this plan was prepared by me and I am res  Signature: Date  Affiliation: Bock AND CARK ENV, U	<del></del>
20.	ASBESTOS ABATEMENT PLAN APPLICATION FI	EE:
	( ) Operation & Maintenance Only	\$ 75
	( ) Up to One (1) NESHAP Unit	\$ 75
	(X) Between One (1) & Ten (10) NESHAP Units	\$ 300
	( ) Between Ten (10) & Fifty (50) NESHAP Units	\$ 600

\$ 900

( ) Over Fifty (50) NASHAP Units

#### STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

# Department of Health Office of Occupational & Radiological Health

#### APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL	INFORMATION:	AREA DESCRIE	TION AND I	PROPOSED	REMEDY
JUTTELINEINIAL					

BUILDING LOCATION: 15 Tower Street, Westerly, RI

<u>INSTRUCTIONS:</u> All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification

(Room Name/No., Evaluation Number, etc.):

Abatement Area 1 – Basement

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove - Approximately 10 square feet of TSI paper located above the boiler and approximately 16 square feet of transite board attached to the ceiling adjacent to the chimney.

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

- (4) PROPOSED REMEDIES:
- (A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2 (b).

See AAP

FORM ASB-16A (11/2003)

REPLACES FORM ASB-16 (03/92)

WHICH IS OBSOLETE

(4) PROPO	SED REMEDIES (cont.):		
` '	y portion of this area be aba X) Yes () No	ted by use of B.8 work pro	ocedures?
	Yes, indicate below which 8 work procedures:	RACM in this area will b	e abated by use of the following
В.	8.2 & B.8.3	[REMOVAL]	-1001
В.	8.2 & B.8.4	[ENCAPSULATION]	
В.	8.2 & B.8.5	[ENCLOSURE]	
В.	8.6	[DEMOLITION]	Approximately 10 square feet
<u>of</u>	TSI paper located above	the boiler and approxim	ately 16 square feet of transite
<u>bo</u>	ard attached to the ceiling a	adjacent to the chimney.	
В.	8.7	[GLOVEBAG]	
В.	8.8	[ASPHALT ROOFING]	
	requesting any waivers to s in this area?	the above selected B.8 pro	ocedure for any of the abatement
`	) Yes (X) No		
uti	yes, attach a detailed des ilize. All items must be ke nivers are requested.	cription of the waivers a yed to the specific section	requested you are proposing to n(s) of the regulations for which
(D) Are you this area		cedures under B.11 for an	y of the abatement activities in
(	) Yes (X) No		•
pro	yes, attach a detailed desoposing to utilize. Alternate ecific section(s) of the regular	<u>e procedures must include</u>	procedures requested you are a justification for not following e of public health.
(E) Will any	RACM remain in this area	after abatement?	
(	) Yes (X) No ()	Beyond scope of inspecti	on
go	ing Operations and Mainte		main and the details of the on- mplemented in accordance with

AGENCY USE ONLY

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

# Department of Health Office of Occupational & Radiological Health

### APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION:	AREA DESCRIPTION AND	PROPOSED REMEDY
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BUILDING LOCATION: 15 Tower Street, Westerly, RI

<u>INSTRUCTIONS:</u> All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification

(Room Name/No., Evaluation Number, etc.):

Abatement Area 2 – First Floor Bathroom

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove - Approximately 34 square feet of flooring material.

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

#### (4) PROPOSED REMEDIES:

(A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2 (b).

See AAP

FORM ASB-16A (11/2003) REPLACES FORM ASB-16 (03/92)

WHICH IS OBSOLETE

(4) PROPOSED REMEDII	ES (cont.):	
(B) Will any portion of this (X) Yes () I	area be abated by use of B.8 work pr	rocedures?
If Yes, indicate be B.8 work procedu	elow which RACM in this area will bares:	be abated by use of the following
B.8.2 & B.8.3	[REMOVAL]	- Heavi
B.8.2 & B.8.4	[ENCAPSULATION]	
B.8.2 & B.8.5	[ENCLOSURE]	
B.8.6	[DEMOLITION]	Approximately 34 square feet
of flooring materi	al.	
B.8.7	[GLOVEBAG]	
B.8.8	[ASPHALT ROOFING]	
	detailed description of the waivers must be keyed to the specific section	
(D) Are you proposing alte this area?	rnative procedures under B.11 for a	ny of the abatement activities in
proposing to utiliz specific section(s)	detailed description of the alternate e. Alternate procedures must include of the regulations and be as protective.	e a justification for not following
•	in this area after abatement?	•
( ) Yes (X)	. , , ,	
	lescription of the RACM that will re and Maintenance Plan that will be i See AAP	

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#### STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

# Department of Health Office of Occupational & Radiological Health

#### APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: 15 Tower Street, Westerly, RI

<u>INSTRUCTIONS:</u> All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification

(Room Name/No., Evaluation Number, etc.):

Abatement Area 3 – Roof Areas

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove - Approximately 164 linear feet of black sealant around the perimeter of the two southern flat roofs and along the portion of the side porch roof attached to the dwelling, approximately 150 square feet of roofing (top and bottom layers) associated with the side porch roof and approximately 180 square feet of roofing associated with the front porch roof.

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

#### (4) PROPOSED REMEDIES:

(A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2 (b).

See AAP

WHICH IS OBSOLETE

(4) PRC	POSED REMEDIES (cont.):		
(B) Will	any portion of this area be ab (X) Yes () No	ated by use of B.8 work pro	ocedures?
	If Yes, indicate below which B.8 work procedures:	n RACM in this area will b	e abated by use of the following
	B.8.2 & B.8.3	[REMOVAL]	
	B.8.2 & B.8.4	[ENCAPSULATION]	
	B.8.2 & B.8.5	[ENCLOSURE]	
	B.8.6	[DEMOLITION]	
	B.8.7	[GLOVEBAG]	
	B.8.8	[ASPHALT ROOFING]	Approximately 164 linear feet
	of black sealant around the	perimeter of the two so	uthern flat roofs and along the
	portion of the side porch roo	of attached to the dwelling	s, approximately 150 square feet
	of roofing (top and botto	om layers) associated w	rith the side porch roof and
	approximately 180 square fe	et of roofing associated wit	th the front porch roof.
	you requesting any waivers to rities in this area?	the above selected B.8 pro	ocedure for any of the abatement
	( ) Yes (X) No If yes, attach a detailed de utilize. All items must be keywaivers are requested.	scription of the waivers in the specific section	requested you are proposing to n(s) of the regulations for which
	you proposing alternative proarea?	ocedures under B.11 for ar	ny of the abatement activities in
	( ) Yes (X) No  If yes, attach a detailed deproposing to utilize. Alternate specific section(s) of the regularity	te procedures must include	procedures requested you are a justification for not following to of public health.
(E) Will	any RACM remain in this are	a after abatement?	
	( ) Yes (X) No (	) Beyond scope of inspecti	on
	going Operations and Maint	of the RACM that will re enance Plan that will be in See AAP	main and the details of the on- mplemented in accordance with

AGENCY USE ONLY

### RHODE ISLAND DEPARTMENT OF HEALTH

# NOTARIZED CERTIFICATION OF ASBESTOS ABATEMENT PLAN

Facility: Residential Dwelling
Address: 15 Tower Street
City/Town: Westerly Zip: 02891 Amendment Phase No:
Abatement Plan Written By: Vincent L. Jacques Certification No: AAC-409PD
Summary of specific waivers/variances being requested:
Type of Asbestos Abatement ( ) Removal ( ) Enclosure ( ) Encapsulation ( X ) Demolition ( ) Glovebag ( X ) Asphalt Roofing ( ) Other (specify)
Is this plan being submitted in response to a Notice of Violation and/or a Notice of Requirement to Submit an Asbestos Abatement Plan? ( ) Yes ( X ) No
If yes, Indicate Notice/Building Evaluation No(s):
Contractor: To Be Determined R.I. License No.:
Estimated Starting Date: As soon as the plan is approved and all notifications have been made.
Pre-Abatement Sampling InformationBulk Samples Collected By:Brian PiccoloCertification No: AAC-0657 ISBulk Samples Analyzed By:Asbestos Identification LaboratoryCertification No: AAL-121Air Samples Analyzed By:Bock and Clark EnvironmentalCertification No: AAL-125
Clearance Air Sampling Information
Air Samples to be Collected By: Not Applicable  Air Samples to be Analyzed By: Not Applicable Certification No:
All Samples to be 7 maryzed by. That Applicates Continuation 1.0.
I certify that: this asbestos abatement plan is prepared and submitted under the provisions of Section 23-24.5-6 of the RI Asbestos Control Act and Parts A and C of the RI Rules and Regulations for Asbestos Control; all abatement/management activities performed in conjunction with this plan must be in compliance with the specifications prescribed in this plan (when approved) and the most current revision of all applicable federal and state regulations; and the asbestos abatement/management activities described in this plan must be performed by a RI licensed asbestos abatement contractor.
Certified by: Title:  (Signature of Building Owner or Agent)
Date:
(Typed/Printed Name of Certifier)
Subscribed and sworn before me this day of, 20  My Commission Expires:
(Notary Public) AFFIX NOTARY SEAL HERE

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Section 7.0	Criteria for Selection of Contractor
Section 8.0	Authorized Disposal Facility
Section 9.0	Methods for Insuring Compliance
Section 10.0	Monitoring Compliance
Section 11.0	Monitoring Requirements
Section 12.0	Confirmation of Proper Asbestos Disposal
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Appendix B	Figures
Appendix C	RI Rules and Regulations for Asbestos Control – B.8.1-B.8.3 B.8.6 and B.8.8 Work Practice Requirements

#### 1.0 Introduction

This asbestos abatement plan is being submitted on behalf of:

Town of Westerly - Department of Utilities Attention: Mr. Paul Corina 65 White Rock Road Westerly, RI 0289

to address the requirements of Part C of the Rhode Island Department of Health's Rules and Regulations for Asbestos Control (R23-24.5-ASB), as amended September 2012. This asbestos abatement plan has been developed for the removal of the asbestos containing materials (ACMs) from three (3) abatement areas associated with the residential dwelling located at 15 Tower Street in Westerly, RI. The approximate quantities of the ACMs are summarized in Section 4.0 of this asbestos abatement plan.

The proposed abatement project must be performed in accordance with all applicable local, state and federal regulations concerning asbestos removal, transportation and disposal, with the possible exception of waivers being requested under this abatement plan.

#### 2.0 Bulk Sampling Information (see Section 13 of Form ASB-16)

The ACMs to be abated were characterized by bulk samples collected by Brian Piccolo of Bock and Clark Environmental (Bock and Clark) (Rhode Island Department of Health (RIDOH) Certification No AAC-0657 IS) during a survey at the subject property on Thursday, February 1, 2018.

Samples collected during the survey were submitted to and analyzed by Asbestos Identification Laboratory (AIL) in Woburn, Massachusetts. AIL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP# 200919-0) and with the RIDOH (AAL – 121). All samples were analyzed in accordance with U.S. Environmental Protection Agency (EPA) recommended protocol ("Follow-up to the Interim Method for Determination of Asbestos in Bulk Insulation Samples" - EPA 600/R-93/116 method "Visual Estimate") using polarized light microscopy (PLM) supplemented by dispersion staining techniques.

A total of ninety (90) samples were collected and submitted for analysis. Appendix B contains copies of the analytical results by AIL, indicating the asbestos content of the material targeted for abatement.

## 3.0 Air Sampling

# 3.1 Pre-abatement Air Sampling (refer to Section 14, Form ASB-16)

Brian Piccolo of Bock and Clark collected one pre-abatement air sample, on Thursday, February 1, 2018 from within the basement area. Bock and Clark believes that this air sample is representative of the abatement areas included within this plan. The sample was collected by sampling over 1,200 liters of air at appropriate flow rate and was submitted under appropriate chain-of-custody to Bock and Clark's licensed laboratory for analysis using phase contrast microscopy

(PCM) using NIOSH Method 7400. As can be seen in the appendices of this report, the collected pre-abatement air sample revealed airborne fiber concentrations of 0.002 fibers per cubic centimeter (f/cc). **Appendix A** contains copies of the analytical results.

### 3.2 Contiguous Area Sampling During Abatement

The proposed abatement is for the residential dwelling located at 15 Tower Street in Westerly, RI, which will be vacant at the time of the abatement and is scheduled to be demolished. As such, Bock and Clark recommends that there be no continuous in-process air sampling conducted in the immediate vicinity of workarea while the abatement is taking place, and that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), shall be conducted throughout the entirety of the asbestos abatement project by the chosen contractor.

#### 3.3 Clearance Air Testing

The proposed project consists of three (3) abatement areas associated with the residential dwelling located at 15 Tower Street in Westerly, RI, which will be vacant at the time of the abatement and is scheduled to be immediately demolished following the asbestos abatement. According to the property owner representative, no one will be entering the building following the asbestos abatement. As such, it is proposed that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), be used in lieu of the clearance air sampling requirements contained in Paragraph B.8.2(p) of the RIDOH's R23-24.5-ASB.

Bock and Clark recommends that a final visual clearance inspection within the containment areas after the abatements have been completed and prior to the building demolition, to ensure that the ACMs associated with this plan have been properly abated. After a final visual inspection has been completed, the building shall be closed to prevent access pending demolition and warning signs shall remain in place until demolition begins.

## 4.0 Description of Abatement Area

The proposed project consists of three (3) abatement areas located at the residential dwelling, located at 15 Tower Street in Westerly, RI.

- Abatement Area 1 Basement Approximately 10 square feet of thermal system insulation (TSI) paper located above the boiler and approximately 16 square feet of transite board attached to the ceiling adjacent to the chimney (see Figure).
- Abatement Area 2 First Floor Bathroom Approximately 34 square feet of flooring material (see Figure).
- Abatement Area 3 Roof Areas Approximately 164 linear feet of black sealant around the perimeter of the two southern flat roofs and along the portion of the side porch roof attached to the dwelling,

approximately 150 square feet of roofing (top and bottom layers) associated with the side porch roof and approximately 180 square feet of roofing associated with the front porch roof (see Figure).

#### 5.0 Interim Operations and Maintenance Program

An O & M Program is designed to (1) clean up asbestos fibers previously released, (2) prevent future release by minimizing ACM disturbance or damage, and (3) monitor the condition of the ACM. The program should continue until all ACM is removed or the building is demolished, and should be implemented as soon as possible.

As the residential dwelling will be vacant at the time of the abatement and is scheduled to be demolished immediately after the asbestos abatements, an O&M Program does not appear warranted at this time for this building.

## 6.0 Specific Abatement Proposal

This abatement plan has been prepared for the removal of the ACM specified in Section 4.0 of this abatement plan, which has been developed for the residential dwelling located at 15 Tower Street in Westerly, RI. The ACM location(s) are depicted in the Figure associated with this plan.

An asbestos contractor licensed in the State of Rhode Island must perform all asbestos abatement work, and all work must be performed in accordance with all applicable local, state, and federal regulations.

Asbestos removal will be performed following the appropriate approval of this plan by the RI Department of Health (RIDOH). The contractor, provided with the appropriate notifications, will then perform the asbestos abatement. It is anticipated that the removal project will take approximately one week to complete.

The ACMs to be abated in Areas 1 and 2 will be completed in accordance with B.8.6 of the RI Rules and Regulations for Asbestos Control, a copy of which has been attached to this plan.

The ACMs to be abated in Area 3 will be completed in accordance with B.8.8 of the RI Rules and Regulations for Asbestos Control, a copy of which has been attached to this plan.

#### 7.0 Criteria for Selection of Contractor

An asbestos abatement contractor has not been chosen for this project at this time. The chosen contractor for this project must be licensed by the State of Rhode Island in accordance with Section B.1 of the Rules and Regulations for Asbestos Control, and must maintain a Contractor's License. The contractor, once chosen, must file appropriate notification with the RIDOH.

# 8.0 Authorized Disposal Facility

The contractor will select the authorized asbestos waste facility. The chosen contractor will forward the name of the approved disposal site to the RI Department of Health.

# 9.0 Methods for Insuring Compliance

See Sections 4.B and 4.D of Form ASB-16A.

## 10.0 Monitoring Compliance

The property owner representative will monitor compliance with the asbestos abatement plan.

# 11.0 Monitoring Requirements (see Section 17 A-D of Form ASB-16)

#### 11.1 In-Process Air Sampling During Abatement

The proposed abatement is for the residential dwelling located at 15 Tower Street in Westerly, RI, which will be vacant at the time of the abatement and is scheduled to be demolished. As such, Bock and Clark recommends that there be no continuous in-process air sampling conducted in the immediate vicinity of work-area while the abatement is taking place, and that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), shall be conducted throughout the entirety of the asbestos abatement project by the chosen contractor.

#### 11.2 Clearance Inspection

The proposed project consists of three (3) abatement areas associated with the residential dwelling located at 15 Tower Street in Westerly, RI, which will be vacant at the time of the abatement and is scheduled to be immediately demolished following the asbestos abatement. According to the property owner representative, no one will be entering the building following the asbestos abatement. As such, it is proposed that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), be used in lieu of the clearance air sampling requirements contained in Paragraph B.8.2(p) of the RIDOH's R23-24.5-ASB.

Bock and Clark recommends that a final visual clearance inspection within the containment area after the abatement has been completed and prior to the building demolition, to ensure that the ACMs associated with this plan have been properly abated. After a final visual inspection has been completed, the building shall be closed to prevent access pending demolition and warning signs shall remain in place until demolition begins.

# 12.0 Confirmation of Proper Asbestos Disposal

The property owner representative shall obtain confirmation of proper asbestos disposal from the contractor and provide copies to the RI Department of Health in accordance with Section C.1.3 (b) of the RI Rules and Regulations for Asbestos Control.

# APPENDIX A

# Bulk Sampling and Pre-Abatement Air Sampling Analytical Results

#### February 06, 2018

Brian Piccolo Bock and Clark Environmental, LLC 889 Boston Neck Road Narragansett, RI 02882

Project Number: 201800015

Project Name: 15 Tower Street, Westerly, RI

Date Sampled:

2018-02-01

Work Received:

2018-02-02

Work Analyzed:

2018-02-06

**Analysis Method:** 

BULK PLM ANALYSIS EPA/600/R-93/116

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
A	Plaster Skim Coat	1st + 2nd Floor	white	Non-Fibrous 100	None Detected
331479					
В	Plaster Skim Coat	1st + 2nd Floor	white	Non-Fibrous 100	None Detected
331480	:				
С	Plaster Skim Coat	1st + 2nd Floor	white	Non-Fibrous 100	None Detected
331481					
Α	Plaster Base Coat	1st + 2nd Floors	gray	Non-Fibrous 100	None Detected
331482					
PB	Plaster Base Coat	1st + 2nd Floors	gray	Cellulose 2 Non-Fibrous 98	None Detected
331483		4-1-0-15		Cellulose 2	None Detected
PC	Plaster Base Coat	1st + 2nd Floors	gray	Non-Fibrous 98	
331484					
iA	Flooring Material	2nd + 3rd Floors	multi	Cellulose 45 Non-Fibrous 55	None Detected
331485				G.77.3	None Detected
B	Flooring Material	2nd + 3rd Floors	multi	Cellulose 50 Non-Fibrous 50	
331486	Classica Material	2nd + 3rd Floor	multi	Cellulose 45	None Detected
IC	Flooring Material	2110 + 310 F1001	man	Non-Fibrous 55	
331487					
A	Plaster —	3rd Floor	gray	Hair 10 Non-Fibrous 90	None Detected
331488					
В	Plaster	3rd Floor	gray	Hair 15 Non-Fibrous 85	None Detected
331489	- AU-				
С	Plaster	3rd Floor	gray	Hair 5 Non-Fibrous 95	None Detected
331490					
Α .	Floor Paper below Hardwood	1st Floor NE Room	red	Cellulose 98 Non-Fibrous 2	None Detected
331491		4-1-El		Cellulose 95	None Detected
В	Floor Paper below Hardwoods	1st Floor NE Room	red	Non-Fibrous 5	
331492 uesday 06 Febr					l age 1 of 6

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
5C	Floor Paper below Hardwoods	1st Floor NE Room	red	Cellulose 98 Non-Fibrous 2	None Detected
331493 6A	Green Flooring	1st Floor Closet NW Room	multi	Cellulose 50 Non-Fibrous 50	None Detected
331494			1.		
6AM 	Brown Mastic	1st Floor Closet NW Room	brown	Non-Fibrous 100	None Detected
331495 3B	Green Flooring	1st Floor NW Room	multi	Cellulose 45 Non-Fibrous 55	None Detected
331496 6BM	Brown Mastic	1st Floor NW Room	brown	Non-Fibrous 100	None Detected
331497 6C	Green Flooring	1st Floor NW Room	multi	Cellulose 50 Non-Fibrous 50	None Detected
331498 6CM	Brown Mastic	1st Floor NW Room	brown	Non-Fibrous 100	None Detected
331499 7 <b>A</b>	Bathroom Flooring	1st Floor	multi	Non-Fibrous 60	Detected Chrysotile 4
331500 7AM	Mastic	1st Floor	yellow	Non-Fibrous 100	None Detected
Alvi	IMastic		yenow	, von 11010ab 100	
331501 7B	Bathroom Flooring	1st Floor			Not Analyzed
331502 7BM	Mastic	1st Floor	yellow	Non-Fibrous 100	None Detected
331503	IMASTIC		yenow		
7C	Bathroom Flooring	1st Floor			Not Analyzed
331504 7CM	Mastic	1st Floor	yellow	Non-Fibrous 100	None Detected
331505 BA	Gypsum Board	1st Floor Bathroom	gray	Cellulose 20 Non-Fibrous 80	None Detected
331506 BB	Gypsum Board	1st Floor Bathroom	gray	Cellulose 20 Non-Fibrous 80	None Detected
331507 3C	Gypsum Board	1st Floor Bathroom	gray	Cellulose 25 Non-Fibrous 75	None Detected
331508 9 <b>A</b>	Tile Glue	1st Floor Bathroom	tan		None Detected
331509	·				
331509 9B	Tile Glue	1st Floor Bathroom	tan	Non-Fibrous 100	None Detected

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
9C	Tile Glue	1st Floor Bathroom	tan	Non-Fibrous 100	None Detected
331511	-				* ***
10A	Red Flooring	Kitchen	multi	Cellulose 30 Non-Fibrous 70	None Detected
331512					
10AM	Mastic -	Kitchen	yellow	Non-Fibrous 100	None Detected
331513	4.50MHH144				
10B	Red Flooring	Kitchen	multi	Cellulose 40 Non-Fibrous 60	None Detected
331514	******				
10BM	Mastic -	Kitchen	yellow	Non-Fibrous 100	None Detected
331515					N D. L
10C	Red Flooring	Kitchen	multi	Cellulose 40 Non-Fibrous 60	None Detected
331516		[(**-)	allaur	New Bibarra 100	None Detected
10CM	Mastic -	Kitchen	yellow	Non-Fibrous 100	None Deceded
331517	TOLD			G-11-1 20	Detected
11A	TSI Paper	Basement	white	1	Chrysotile 60
331518		Ph.			Not Applying
11B	TSI Paper -	Basement			Not Analyzed
331519				1	Not Proluged
11C	TSI Paper	Basement			Not Analyzed
331520					Detected
12A 	Transite Board	Basement	gray	Non-Fibrous 80	Chrysotile 20
331521	,				
12B	Transite Board	Basement			Not Analyzed
331522					
12C	Transite Board	Basement			Not Analyzed
331523					
13A	Gypsum Board	Apartment Addition	gray	Cellulose 20 Non-Fibrous 80	None Detected
331524					
13B	Gypsum Board	Apartment Addition	gray	Cellulose 15 Non-Fibrous 85	None Detected
331525					
13C	Gypsum Board	Apartment Addition	gray	Cellulose 20 Non-Fibrous 80	None Detected
331526				**************************************	
14A	Joint Compound	Apartment Addition	white	Non-Fibrous 100	None Detected
331527					
14B	Joint Compound	Apartment Addition	white	Non-Fibrous 100	None Detected
331528					
Tuesday 06 Februa	ry			Pa	ge 3 of 6

Material	Location	Color	Non-Asbestos	%	Asb	estos %
Joint Compound	Apartment Addition	white	Non-Fibrous	100	None	Detected
			G 31 1	<b>.</b>	Mono	Detected
Cream Flooring	Apartment Addition	muiti	Non-Fibrous	50	MOTTE	Detected
		<u> </u>				
Mastic	Apartment Addition	yellow	Non-Fibrous	100	none	Detected
Cream Flooring	Apartment Addition	multi	Cellulose		None	Detected
-			Non-Fibrous	50		
Mastic	Apartment Addition	yellow	Non-Fibrous	100	None	Detected
Cream Flooring	Apartment Addition	multi	Cellulose	40	None	Detected
-	, , , , , , , , , , , , , , , , , , , ,		Non-Fibrous	60		
Mastic	Apartment Addition	yellow	Non-Fibrous	100	None	Detected
		100			A7	Detected
Hardwood Pattern Flooring  -	Apartment Addition	multi	Cellulose Non-Fibrous	45 55	none	Detected
Mastic	Apartment Addition	yellow	Non-Fibrous	100	None	Detected
-						
Hardwood Pattern Flooring	Apartment Addition	multi	Cellulose Non-Fibrous	45 55	None	Detected
Mastic	Apartment Addition	yellow	Non-Fibrous	100	None	Detected
<b>-</b>				-		
Hardwood Pattern Flooring	Apartment Addition	multi	Cellulose Non-Fibrous	40 60	None	Detected
Mastic	Apartment Addition	yellow	Non-Fibrous	100	None	Detected
-				:		
Building Paper	Exterior	black	Cellulose Non-Fibrous	80 20	None	Detected
Building Paper	Exterior	black	Cellulose	80	None	Detected
-			Non-Fibrous	20		
Building Paper	Exterior	black	Cellulose Non-Fibrous	85 I 15	None	Detected
	. ASSISSE					
Window Glazing -	Windows	gray	Non-Fibrous	100	None	Detected
Window Glazing	Windows	gray	Non-Fibrous	100	None	Detected
-  -						
	Joint Compound  Cream Flooring  Mastic  Cream Flooring  Mastic  Cream Flooring  Mastic  Hardwood Pattern Flooring  Mastic  Hardwood Pattern Flooring  Mastic  Hardwood Pattern Flooring  Mastic  Building Paper  Building Paper  Building Paper  Window Glazing	Joint Compound Apartment Addition  Cream Flooring Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Cream Flooring Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Hardwood Pattern Flooring Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Hardwood Pattern Flooring Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Mastic Apartment Addition  Building Paper Exterior  Building Paper Exterior  Window Glazing Windows	Joint Compound Apartment Addition white  Cream Flooring Apartment Addition yellow  Cream Flooring Apartment Addition multi  Mastic Apartment Addition yellow  Cream Flooring Apartment Addition multi  Mastic Apartment Addition yellow  Hardwood Pattern Flooring Apartment Addition wulti  Mastic Apartment Addition yellow  Building Paper Exterior black  Building Paper Exterior black  Window Glazing Windows gray	Joint Compound Apartment Addition white Non-Fibrous  Cream Flooring Apartment Addition multi Cellulose Non-Fibrous  Mastic Apartment Addition yellow Non-Fibrous  Cream Flooring Apartment Addition multi Cellulose Non-Fibrous  Mastic Apartment Addition yellow Non-Fibrous  Cream Flooring Apartment Addition multi Cellulose Non-Fibrous  Mastic Apartment Addition yellow Non-Fibrous  Mastic Apartment Addition multi Cellulose Non-Fibrous  Mastic Apartment Addition yellow Non-Fibrous  Mastic Apartment Addition yellow Non-Fibrous  Mastic Apartment Addition multi Cellulose Non-Fibrous  Mastic Apartment Addition yellow Non-Fibrous  Building Paper Exterior black Cellulose Non-Fibrous  Window Glazing Windows gray Non-Fibrous	Joint Compound Apartment Addition white Non-Fibrous 100  Cream Flooring Apartment Addition multi Cellulose 50 Non-Fibrous 50  Mastic Apartment Addition yellow Non-Fibrous 100  Cream Flooring Apartment Addition multi Cellulose 50 Non-Fibrous 50  Mastic Apartment Addition yellow Non-Fibrous 100  Cream Flooring Apartment Addition multi Cellulose 40 Non Fibrous 60  Mastic Apartment Addition yellow Non-Fibrous 100  Hardwood Pattern Flooring Apartment Addition multi Cellulose 45 Non-Fibrous 55  Mastic Apartment Addition yellow Non-Fibrous 100  Hardwood Pattern Flooring Apartment Addition wulti Cellulose 45 Non-Fibrous 55  Mastic Apartment Addition multi Cellulose 45 Non-Fibrous 55  Mastic Apartment Addition yellow Non-Fibrous 100  Hardwood Pattern Flooring Apartment Addition wulti Cellulose 45 Non-Fibrous 55  Mastic Apartment Addition yellow Non-Fibrous 100  Hardwood Pattern Flooring Apartment Addition wyllow Non-Fibrous 100  Building Paper Exterior black Cellulose 80 Non-Fibrous 20  Building Paper Exterior black Cellulose 85 Non-Fibrous 15  Window Glazing Windows gray Non-Fibrous 100	Joint Compound Apartment Addition white Non-Fibrous 100 None Cream Flooring Apartment Addition multi Cellulose 50 None Mastic Apartment Addition multi Cellulose 50 None Non-Fibrous 50 Mastic Apartment Addition multi Cellulose 50 None Non-Fibrous 50 Mastic Apartment Addition multi Cellulose 40 None Cream Flooring Apartment Addition multi Cellulose 40 None Non-Fibrous 60 Mastic Apartment Addition multi Cellulose 40 None Non-Fibrous 50 Mastic Apartment Addition multi Cellulose 40 None Non-Fibrous 50 Mastic Apartment Addition multi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition multi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition multi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition multi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition multi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition willi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition willi Cellulose 45 None Non-Fibrous 55 Mastic Apartment Addition willi Cellulose 80 None Hardwood Pattern Flooring Apartment Addition willi Cellulose 80 None Non-Fibrous 20 Mastic Apartment Addition black Cellulose 80 None Non-Fibrous 20 Building Paper Exterior black Cellulose 80 None Non-Fibrous 15 Window Glazing Windows 9ray Non-Fibrous 100 None

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
18C	Window Glazing	Windows	gray	Non-Fibrous 100	None Detected
331547 19 <b>A</b>	Asphalt Roof Shingle	Roof	black	Fiberglass 30 Non-Fibrous 70	None Detected
331548					None Detected
19B 	Asphalt Roof Shingle	Roof	black	Fiberglass 30 Non-Fibrous 70	
331549 19C	Asphalt Roof Shingle	Roof	black	Fiberglass 35 Non-Fibrous 65	None Detected
331550 20A	Top Layer Roofing	Rear Flat Roof	black	Synthetic 25 Non-Fibrous 75	None Detected
331551 20B	Top Layer Roofing	Rear Flat Roof	black	Synthetic 30 Non-Fibrous 70	None Detected
331552 20C	Top Layer Roofing	Rear Flat Roof	black	Synthetic 20 Non-Fibrous 80	None Detected
331553 21A	Bottom Layer Roofing	Rear Flat Roof	black	Fiberglass 30 Non-Fibrous 70	None Detected
331554 21B	Bottom Layer Roofing	Rear Flat Roof	black	Fiberglass 25 Non-Fibrous 75	None Detected
331555 21C	Bottom Layer Roofing	Rear Flat Roof	black	Fiberglass 25 Non-Fibrous 75	None Detected
331556 22A	Black Sealant	Rear Flat Roof	black	Non-Fibrous 100	None Detected
331557 22B	Black Sealant	Rear Flat Roof	black	Non-Fibrous 100	None Detected
331558 22C	Black Sealant	Rear Flat Roof	black		Detected Chrysotile 2
331559 23 <b>A</b>	Top Layer Roofing	Side Flat Roof	black	Cellulose 30 Other 3 Non-Fibrous 65	Detected Chrysotile 2
331560 23B	Top Layer Roofing	Side Flat Roof			Not Analyzed
331561 23C	Top Layer Roofing	Side Flat Roof			Not Analyzed
331562 24 <b>A</b>	Bottom Layer Roofing	Side Flat Roof	black	Non-Fibrous 70	Detected Chrysotile 30
331563					•
24B	Bottom Layer Roofing	Side Flat Roof			Not Analyzed
331564 Tuesday 06 Februa				_  	l age 5 of 6

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
24C	Bottom Layer Roofing	Side Flat Roof			Not Analyzed
331565					
25A	Asphalt Roofing	Front Porch	black		Detected Chrysotile 2
331566					
25B	Asphalt Roofing	Front Porch			Not Analyzed
331567					
25C	Asphalt Roofing	Front Porch	1		Not Analyzed
331568					

Tuesday 06 February

Michael Thum

End of Report

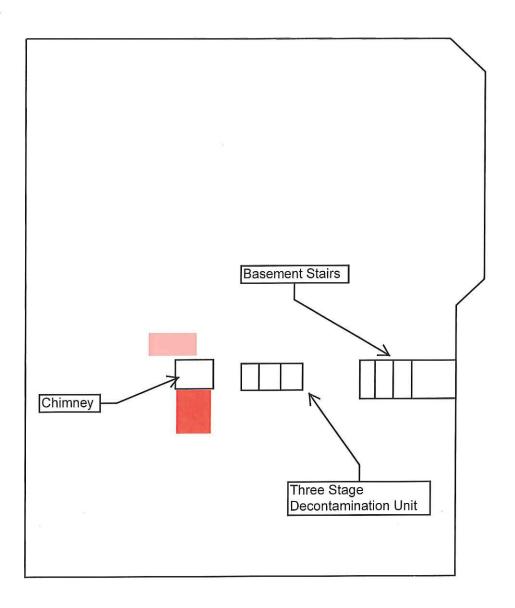
Page 6 of 6

Analyzed by:

Batch: 29419

# APPENDIX B

# Figures



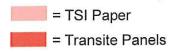
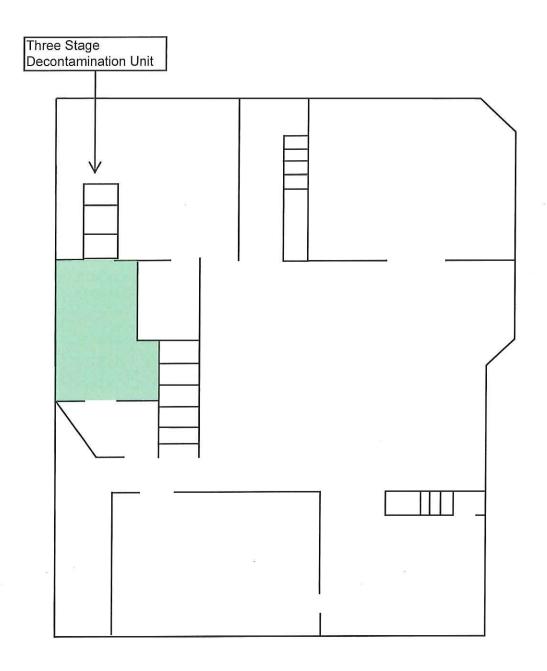


Figure 1

15 Tower Street Westerly, RI



= Bathroom Flooring

Figure 2

15 Tower Street Westerly, RI



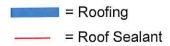


Figure 3

15 Tower Street Westerly, RI

# **APPENDIX C**

RI Rules and Regulations for Asbestos Control – B.8.1-B.8.3, B.8.6 and B.8.8 Work Practice Requirements

#### **B.8** WORK PRACTICE REQUIREMENTS

#### B.8.1 Applicability

Any Asbestos Abatement Contractor that engages in any Asbestos Abatement Project that involves greater than ten (10) linear feet (three (3) meters) of pipe covered or coated with asbestos containing material or twenty five (25) square feet (three (3) square meters) of asbestos containing material used to cover or coat any surface other than pipe shall comply with the work practices contained in Subpart B.8 of these regulations and any additional work practice requirements contained in the asbestos abatement plan approved for that project by the Director of Health. Specific requirements for Category I and Category II Nonfriable ACM that is not Regulated Asbestos Containing Material (RACM) are contained in Sections B.8.8 through B.8.10 of these regulations.

# B.8.2 General Requirements for Removal, Encapsulation and/or Enclosure of Regulated Asbestos Containing Material (RACM)

- (a) Barriers to isolate contaminated from uncontaminated areas shall be constructed of polyethylene sheeting attached securely in place.
- (b) All surfaces shall be wet cleaned of dust or debris. Wet cleaning of contaminated items shall be performed if necessary. All movable objects shall be removed from the work area. All non-movable objects in the work area shall be covered with 6-mil polyethylene sheeting secured in place. All openings or penetrations between the work area and uncontaminated areas shall be sealed, including windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers and skylights.
- (c) Floor sheeting shall consist of two (2) layers of 6-mil polyethylene sheeting. Floor sheeting shall extend up sidewalls at least twelve (12) inches and be sized to minimize seams. No seams shall be located at wall/floor joints.
- (d) Wall sheeting shall consist of two (2) layers of 4-mil polyethylene sheeting. It shall be installed to minimize joints and shall extend beyond wall/floor joint at least twelve (12) inches. No seams shall be located at wall/wall joints.

- (e) A worker decontamination enclosure system, consisting of a clean room, shower room and equipment room, each separated from each other and from the work area by airlocks and accessible through doorways protected with two (2) overlapping polyethylene sheets, shall be provided in accordance with OSHA 29 CFR 1926.58(j). Procedures for the utilization of this system shall be established which prevent contamination of areas outside the work area.
- (f) All HVAC equipment in or passing through the work area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape. All system filters shall be replaced at the conclusion of the abatement and disposed of as asbestos waste. The ventilation system ductwork interiors shall be decontaminated whenever necessary.

#### (g) Posting

- (1) Warning signs in accordance with OSHA 29 CFR 1926.58(k) shall be displayed at all approaches to any location where airborne fiber levels can be expected to exceed the Indoor Non-Occupational Air Exposure Standard established by Section A.3.1 of these regulations.
- (2) Warning signs to advise the public of the location(s) within the building where any asbestos abatement activity is in progress shall be posted at all building entrances and at least one other conspicuous place per floor. These signs shall be of the same dimensions as the Warning/Danger signs required in Subparagraph B.8.2(g)(1) of these regulations.
- (3) Warning signs in accordance with Section F.3.4 of these regulations shall be posted on vehicles used to transport Asbestos Containing Waste Materials during loading and unloading of the waste.
- (h) Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement. Wet cleaning shall be followed by HEPA vacuuming after surfaces have been allowed to dry. The sequence of wet cleaning and vacuuming shall be repeated at twenty four (24) hour intervals until no visible residue is observed in the work area.
- (i) Negative pressure ventilation units with HEPA filtration, in sufficient number to provide one (1) workplace air change every fifteen (15) minutes, shall be operated continuously from the time of barrier construction through the time acceptable final clearance air-monitoring results are obtained. These units shall exhaust filtered air to the outside of the building. Filtered air shall not be exhausted to uncontaminated interior spaces.
- (j) All Asbestos Containing Waste Materials shall be adequately wetted before being placed into containers for disposal.
- (k) Asbestos Containing Waste Materials shall be placed in impermeable containers for disposal. Metal or fiber drums with locking-ring tops shall be used when asbestos waste contains sharp edged components. Double polyethylene bags of at least 6-mil thickness and which can be securely sealed may be used for waste. Large components or structural members may be removed intact and contained in leak-tight wrapping, equivalent to at least two (2) layers of 6-mil polyethylene sheeting, secured with tape for disposal.
- (l) All containers, bags, drums and wrapped components shall be labeled so that labels have the appearance of or are constructed in accordance with USDOT 49 CFR 172, Subpart E and OSHA

29 CFR 1926.58(k). Each container, bag, drum or wrapped component shall also be labeled or tagged with the name and license number of the asbestos abatement contractor generating the waste, as well as the asbestos abatement project number and location at which the waste was generated.

- (m) Storage of asbestos waste containers awaiting transport to an authorized disposal facility shall be in a secured location to prevent access by unauthorized personnel.
- (n) Transport and disposal of asbestos waste shall be in accordance with the provisions of Appendix D to 40 CFR 763, Subpart E and USDOT 49 CFR 173.1300.
- (o) Disposal of Asbestos Containing Waste Materials. All Asbestos Containing Waste Materials shall be deposited as soon as is practical by the waste generator at:
  - (1) A waste disposal site operated in accordance with the provisions of 40 CFR 61.154, or equivalent regulations promulgated by a state or local NESHAP designee; or
  - (2) An EPA-approved site that converts RACM and Asbestos Containing Waste Materials into nonasbestos (asbestos-free) material according to the provisions of 40 CFR 61.155.
- (p) Access to work areas shall be controlled and posting requirements shall remain in effect until compliance with the air exposure standard has been verified by procedures outlined below:
  - (1) Samples shall be collected and analyzed in accordance with the procedures specified by NIOSH Method 7400 (most current Revision) for asbestos fibers in air or equivalent method;
  - (2) Air volumes shall be sufficient to accurately determine fiber concentrations to 0.01 fibers/cubic centimeter of air (f/cc) for fibers greater than five (5) microns in length or 300 nanograms per cubic meter. A minimum air volume of 1000 liters shall be sampled;
  - (3) Air sampling shall be conducted in representative locations with portable fans circulating air to simulate actual use conditions;
  - (4) An acceptable airborne fiber concentration, as established by clearance air monitoring shall not exceed 0.01 f/cc for fibers greater than five (5) microns in length or 300 nanograms per cubic meter; and
  - (5) Air sampling shall be conducted by a representative of the building owner who is not subject to the control or supervision of the Asbestos Abatement Contractor for the asbestos abatement plan.
  - (6) Notwithstanding the requirements contained in Subparagraphs B.8.2(p)(1)-(p)(5) above, control of access and posting requirements for buildings subject to the AHERA regulations shall remain in effect until compliance with Subparagraphs C.1.3(a)(5)-(8) of these regulations has been demonstrated.

# B.8.3 Specific Requirements for Removal of Regulated Asbestos Containing Material (RACM)

(a) All RACM shall be adequately wetted prior to removal. In addition, all RACM exposed during

- cutting and disjoining operations shall be adequately wet and all RACM shall be kept adequately wet during stripping operations.
- (b) Components shall be removed intact or in large sections whenever possible and carefully lowered to the floor.
- (c) RACM shall be removed in small sections and containerized when adequately wet. At no time shall material be allowed to accumulate or become dry. Structural components shall be adequately wetted prior to being contained in leak-tight wrapping for disposal.
- (d) Material shall not be dropped or thrown to the floor level. For materials located at heights greater than fifty (50) feet above the floor, a dust-tight, enclosed chute shall be constructed to transport removed material to containers on the floor. RACM may be dropped to a raised scaffold or containerized at elevated levels for disposal. Materials greater than fifteen (15) feet above the floor shall be dropped onto inclined chutes or scaffolding or containerized at elevated levels for eventual disposal.
- (e) A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of RACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen so as to be compatible with subsequent coverings.
- (f) RACM is not required to be stripped from large facility components such as reactor vessels, large tanks, and steam generators if the following requirements are met:
  - (1) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
  - (2) The component is encased in a leak-tight wrapping.
  - (3) The leak-tight wrapping is labeled according to Section F.3.4 of these regulations during all loading and unloading operations and during storage.
- (g) When the temperature at the point of wetting is below 0°C (32°F):
  - (1) The Asbestos Abatement Contractor need not comply with the wetting provisions of Paragraphs B.8.3(a) and (c).
  - (2) The Asbestos Abatement Contractor shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extend possible.
  - (3) During periods when wetting operations are suspended due to freezing temperatures, the Asbestos Abatement Contractor must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Agency during normal business hours at the asbestos abatement project site. The Asbestos Abatement Contractor shall retain temperature records for at least two years.

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#### B.8.6 Specific Requirements for Demolition of Structures Containing Asbestos

- (a) Any demolition of a structure or portion of a structure which contains structural members, building materials or structural components composed of or covered by RACM shall be preceded by a removal of all such materials in accordance with Sections B.8.2 and B.8.3 of these regulations. Said removal must be completed before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. Notwithstanding the foregoing, RACM need not be removed before demolition if:
  - (1) It is Category I nonfriable ACM that is not in poor condition and is not friable; or
  - (2) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or
  - (3) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos contaminated debris must be treated as Asbestos Containing Waste Material and adequately wet at all times until disposed of; or

- (4) It is Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
- (b) For Emergency Asbestos Abatement Projects described in Paragraph A.4.2(c) of these regulations, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- (c) If a facility is demolished by intentional burning, all RACM, including Category I and Category II nonfriable ACM, must be removed in accordance with these regulations before burning.
- (d) In lieu of the requirements specified in Paragraphs B.8.2(b), (c), (d), and (f) and B.8.3(e) of these regulations, Asbestos Abatement Contractors engaging in demolition activities shall comply with the following:
  - (1) Prior to beginning a demolition project, all doors, windows, floor drains, vents and other openings to the outside of the building and to areas within the building that do not contain asbestos materials shall be sealed off with 6-mil polyethylene sheeting and waterproof tape or equivalent acceptable to the Agency.
  - (2) If a structure is to be partially demolished, HVAC equipment in the demolition area or passing through it but servicing areas of the building which will remain, shall be shut down and locked out and thoroughly sealed with 6-mil polyethylene sheeting and waterproof tape.
  - (3) If the building owner proposes not to conduct clearance air sampling following asbestos abatement activities conducted for demolition purposes, the building owner must submit written justification to the Agency which describes how personnel who must occupy the building prior to demolition will be protected.
  - (4) All other requirements of Sections B.8.2 and B.8.3 of these regulations, unless specifically deleted in Paragraph B.8.6(d) of these regulations, shall apply to demolition abatement activities.

#### B.8.8 Specific Requirements for Removal of Category I Nonfriable ACM - Asphalt Roofing Products

- (a) All surfaces shall be wet cleaned of dust or debris. All movable objects shall be removed from the roof area. All openings or penetrations on the roof area and at least one level below the roof area shall be sealed, including windows, doorways, drains, ducts, grills, grates, diffusers and skylights.
- (b) Floor/ground sheeting shall consist of at least two (2) layers of 6-mil polyethylene sheeting and shall be utilized as follows:
  - (1) If the roof is pitched, sheeting shall be applied to the first horizontal surface below the work area and shall extend from the edge of the building to at least ten (10) feet away from the building. All material being abated shall be confined to the roof area.
  - (2) If the roof is flat, sheeting shall extend at least ten (10) feet away from the perimeter of the work area. When the edge of the roof is less than ten (10) feet from the perimeter of the work area, sheeting shall be applied in accordance with Paragraph B.8.9(b)(1) such that the outer edge of the sheeting is at least ten (10) feet from the perimeter of the work area.
- (c) All HVAC intake or exhaust vents on the roof area and at least one level below the roof area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape.

- (d) A minimum of a two chambered worker decontamination enclosure system shall be provided on site in accordance with OSHA 29 CFR 1926.58, Appendix G. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the roof area.
- (e) Warning signs shall be posted in accordance with Paragraph B.8.2(g) of these regulations.
- (f) Category I Nonfriable ACM shall be removed in small sections and containerized when wet. At no time shall material be allowed to accumulate or become dry.
- (g) Category I Nonfriable ACM shall not be dropped or thrown to the floor/ground level. For roofs at heights greater than fifty (50) feet above the floor/ground, a dust-tight, enclosed chute shall be constructed to transport removed Category I Nonfriable ACM to containers on the floor/ground. Category I Nonfriable ACM may be dropped to a raised scaffold or containerized at elevated levels for disposal.
- (h) All Category I Nonfriable ACM shall be adequately wetted before being placed into containers for disposal. Disposal shall be in accordance with Paragraphs B.8.2(k) through B.8.2(o) of these regulations.
- (i) A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of Category I Nonfriable ACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen so as to be compatible with subsequent coverings.
- (j) Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement.
- (k) Personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.58(f), may be used in lieu of the clearance air sampling requirements contained in Paragraph B.8.2(p) of these regulations.



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Department of Health

OIC 8 B 7/24/18

Three Capitol Hill

Room 206

Providence, RI 02908-5097

401-222-5960 RI Relay 711 www.health.ri.gov

July 17, 2018

Town of Westerly Paul Corina 45 Broad Street Westerly, RI 02891

Plan Number: 79542

Dear Paul Corina:

This is in reference to the asbestos abatement plan which you submitted for: Residentiall Dwelling 15 Tower St Westerly, RI 02891.

It is our understanding that, since this is a demolition and pre-abatement air sampling has not been performed, the requirements of Paragraph B.4.4(a) and Part B.4.2 of the Rules and Regulations for Asbestos Control will be adhered to. Please note that references to OSHA 29 CFR 1926.58(H) should be amended to read OSHA 29 CFR 1926.1101.

The above referenced asbestos abatement plan is hereby approved as conforming to Part C of the Rhode Island Rules and Regulations for Asbestos Control.

Please note that a licensed asbestos abatement contractor shall submit an ASB-22 start work notification at least 10 working days before any on-site work begins at a planned asbestos project. In addition, a licensed site supervisor shall notify this office by telephone when the licensed asbestos contractor begins site preparation.

A "Confirmation of Receipt of Asbestos for Disposal" must be forwarded to this office within five (5) working days of receipt.

The above referenced asbestos abatement plan is hereby approved as conforming to Part C of the Rhode Island Rules and Regulations for Asbestos Control.

If you have any further questions concerning the above referenced asbestos abatement plan, please contact Erin Ferreira, 222-7777.

Sincerely.

Bonnie Cassani-Brandt

Asbestos, Lead, and Radon Program Manager Center for Healthy Homes and Environment

Cc: Vincent Jacques [5LdemoASB22]

State of Rhode Island and Providence Plantations



#### Department of Health

Three Capitol Hill Room 206 Providence, RI 02908-5097

401-222-5960 RI Relay 711 www.health.ri.gov

July 17, 2018

Town of Westerly Paul Corina 45 Broad Street Westerly, RI 02891

Plan Number: 79542

Dear Paul Corina:

This is in reference to the asbestos abatement plan which you submitted for:

Residentiall Dwelling 15 Tower St Westerly, RI 02891.

The above referenced asbestos abatement plan is hereby approved as conforming with Part C of the Rhode Island Rules and Regulations for Asbestos Control.

A review of your request for a waiver of floor poly and clearance air sampling as described in the scope of work has been approved by this office.

Please note that a licensed asbestos abatement contractor shall submit an ASB-22 start work notification at least 10 working days before any on-site work begins at a planned asbestos project. In addition, a licensed site supervisor shall notify this office by telephone when the licensed asbestos contractor begins site preparation.

A "Confirmation of Receipt of Asbestos for Disposal" must be forwarded to this office within five (5) working days of receipt.

If you have any further questions concerning the above referenced asbestos abatement plan, please contact Erin Ferreira, 222-7777.

Sincerely,

Bonnie Cassani-Brandt

Asbestos, Lead, and Radon Program Manager Center for Healthy Homes and Environment

[StandardPlanApprovalWithWaiver cb1]